

Driving asset value

during a time of

economic
CHANGE

Actionable data improves bottom lines, client outcomes, and energy efficiency.

“For the times, they are a-changin’,” Bob Dylan first famously sang decades ago, and he might as well have been talking about today’s commercial real estate landscape. The risks and rewards of doing business have never been more uncertain, with new business models and competition from companies like WeWork; the widespread use of innovative technology; changing tenant and investor expectations; a potential economic downturn combined with record high asset prices; and even billion-dollar climate impacts.

Welcome to the era of “business as unusual.”

And yet, the commercial real estate industry historically has struggled to keep up with the fast pace of change, according to Deloitte’s *2019 Commercial Real Estate Industry Outlook*.¹ To gain a competitive advantage, firms need to learn to take the “right risks.” As Dylan’s song suggests, the present will soon leave behind those living in the past — and it’s always better to be an agent rather than a casualty of change.

Amid such uncertainty, it can be tough to know which actions to take.

By Brenden Millstein,
Carbon Lighthouse

¹ Deloitte, *2019 Commercial Real Estate Industry Outlook*.

² Madison Gas & Electric Company, *Managing Energy Costs in Office Buildings*.

³ Energy.gov, *About the Commercial Buildings Integration Program*.

⁴ Sara Neff at TEDx, *Erected Dysfunction: Our Buildings Hurt Us, But They Don't Have To*.

Faced with the impossible task of predicting the unpredictable, firms are still on the hook for boosting NOI and exit values. And while clairvoyance remains unattainable, the predictive power of actionable data analytics might be the next best thing. Actionable data enables firms to move with agility to adopt the new technologies which drive value and make assets “future ready.”

What is actionable data?

Both action and inaction can be equally risky for an investment manager. The “fail early, fast, and often strategy” is a product of start-ups without real assets or billion-dollar portfolios, and not being able to accurately assess risk. That’s why many turn to data to help inform decision-making. Indeed, the term “big data” has become a buzzword of sorts with the widening availability of real-time, comprehensive data.

But the wide availability of data can both aid and impede action — too much or little of it can be equally paralyzing. That’s why it’s better to focus on collecting “actionable” data. In the context of commercial real estate, actionable data simply is information which can easily be paired with an action that drives value. Actionable data allows us to understand a building as the complex ecosystem it is. This kind of data empowers investment managers to uncover hidden value in assets which they otherwise might have missed.

In today’s changing market, actionable data can drive net operating income — improving property performance and potential exit value — while improving tenant experience. All of this allows investment managers to take the “right risks” to reap calculated rewards.

Boosting NOI with data-driven decisions

When actionable data enables investment managers to look at a building more holistically, new sources of value appear. Take energy consumption, for example, which accounts for nearly 29% of operating expenses for the average U.S. office building.² Energy also is one of the fastest-growing costs for hotels, according to U.S. Environmental Protection Agency’s ENERGY STAR program. Meanwhile, some 30% of the energy used in commercial buildings is wasted.³ While many may think of energy consumption as a cost sink, actionable data can turn it into a source of financial value.

At Carbon Lighthouse, we regularly deliver 10% to 30% energy savings in buildings with central HVAC (heating, ventilation, and air conditioning) systems by using actionable data analytics to tap efficiency reserves — the building’s wasted energy. Through this ongoing service, we can guarantee the real dollar value of those savings. Those energy savings can re-value a building and bring in better refinancing terms to fund other investments needed to remain competitive.

As an example, guaranteed annual savings of \$100,000 in energy spend, considering an average cap rate of 5%, could increase asset value by \$2 million at disposition. To date, we’ve worked in over 600 buildings across the U.S., helping organizations such as Tesla Motors, A&B Properties, Kilroy Realty, and Ohana Real Estate Investors turn energy waste into a source of guaranteed revenue.

As Carbon Lighthouse client Sara Neff, senior vice president at Kilroy Realty recently said during a TEDx event: “If you aren’t asking about energy

efficiency, you’re just taking your wallet and throwing it on the ground.”⁴

Anticipating and adjusting to tenant preferences

Actionable data also can help investment managers adapt buildings to changing tenant preferences and to anticipate tenant needs within the context of mounting climate impacts. Whether it is the recent polar vortex hitting Chicago and other areas of the Midwest or 2018’s record heat waves across cities in North

Tesla Motors

With a shared mission to move the world toward greater sustainability, we partnered with Tesla Motors to help it turn energy waste into guaranteed profit at its mixed-use office, industrial, and R&D headquarters — home to their core engineering group, the Dyna Lab, for powertrain testing and battery testing.

Our team not only exceeded predicted savings with exceptional ROI, but also demonstrated how Carbon Lighthouse’s sensors and engineering processes could uncover hidden savings that the BMS, or competing energy services, simply could not.

This was a top-of-the-line new build that already had three consultants evaluate its energy performance. Yet Carbon Lighthouse still was able to find \$1.7 million in savings.

After completing implementation, the building’s use completely changed — from a lab space to mixed-use office. However, through our ongoing monitoring, we were able to maintain the savings despite the change in building use and occupancy.

⁵ Munich Re, *The Natural Disasters of 2018 in Figures*.

America, the pressure to maintain tenant comfort has never been higher.

Meanwhile, climate change is impacting the wider economy. Munich Re recently released a report which found climate-related disasters in 2018 inflicting \$160 billion of losses worldwide, of which only half was insured.⁵ Also, entities like S&P Global Ratings have started to include environmental, social, and governance (ESG) sections within their issuer credit rating reports on corporate entities.

The most immediate bottom line impact of extreme environmental conditions is increased operational costs to ensure that HVAC and other building

systems keep up with the higher strain. It might be a lot hotter or colder outside, but tenants are going to expect the same level of comfort inside the building. Actionable data helps investment managers both anticipate and respond to these tenant demands quickly and painlessly. The necessary actions can be tied to the data. In this way, investment managers can use the principles of capitalism to save the planet while boosting the bottom line.

Better start swimmin'

Dylan's song continues: "Then you better start swimmin', or you'll sink like

a stone." During times of great change, the biggest risk is being unable to move deliberately and nimbly. Actionable data is the great unlock because it allows us to pair new information with action to move forward rather than getting caught dead in the water.

Don't fear the dynamism of today's market — embrace it as a new source of value. Whether it's responding to a market downturn, new competition, or climate impacts, actionable data shines the way to a brighter future. ♦

Brenden Millstein is CEO and Co-founder of Carbon Lighthouse.

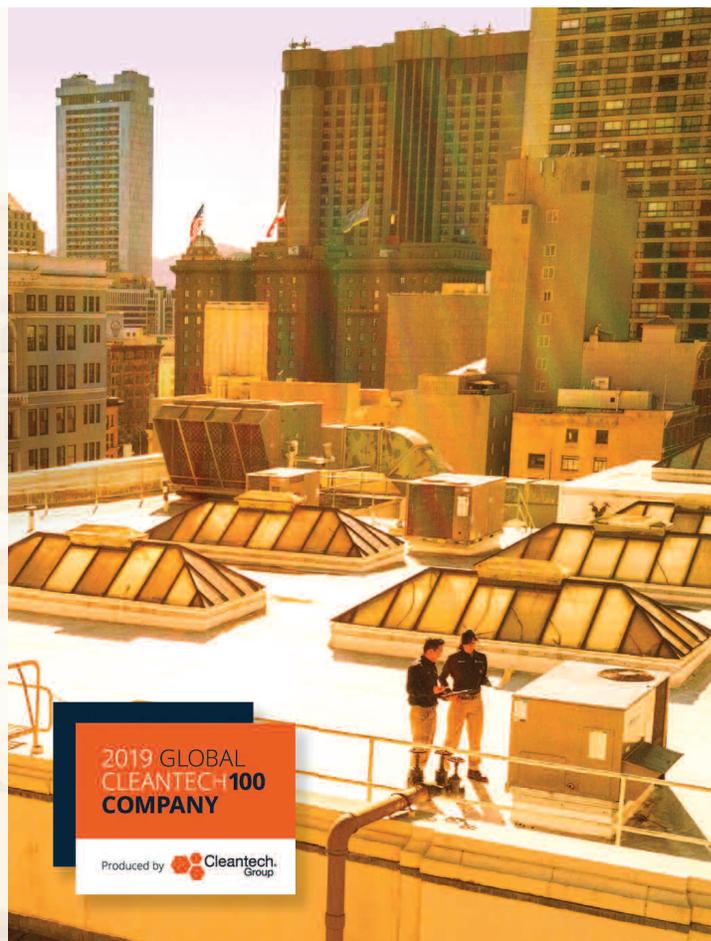


YOU SEE BUILDINGS. WE SEE
**\$50M-100M IN NEW
PORTFOLIO VALUE**

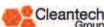
See how data-driven energy savings drive guaranteed revenue and ongoing OPEX reductions.

CARBONLIGHTHOUSE.COM

SAN FRANCISCO • NEW YORK
LOS ANGELES • HONOLULU



2019 GLOBAL
CLEANTECH 100
COMPANY

Produced by  Cleantech Group